



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

NON-FEE

Attorney Docket: P4136-DIV

In re the Application of: **Eugene Jackson, et al.**

Examiner: **J. Parsa.**

Serial No.: **09/887,692**

Group Art Unit: **1621**

Filed: **06/18/01**

For: **A NOVEL METHOD FOR PRODUCTION OF MIXED...**

AMENDMENT UNDER 37 CFR § 1.111

Honorable Commissioner of Patents and Trademarks
Box: Amendment – NON-FEE
Washington, D.C. 20231

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TECH CENTER 1600/2900

Dear Sir:

In response to the Office Action mailed June 23, 2002, and in view of the one month extension of time filed herewith, please consider the following remarks and amendments.

IN THE CLAIMS:

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claim 6 without prejudice, and without any disclaimer of the subject matter therein, as shown.

- 1 [6. (Canceled) All catalysts for the production of mixed alcohols taught herein.]

Please add new claims 7 - 10 without prejudice, and without any disclaimer of the subject matter of any other claim, as follows

1 7. (New) Nanosized Group VI transition metal catalysts for use in producing mixed
2 alcohols from gases including carbon monoxide and hydrogen, wherein said nanosized Group VI
3 transition metal catalysts are produced by selecting Group VI metals, and mixtures thereof, and
4 then nanosizing said Group VI metals, and mixtures thereof to a mean particle diameter in the
5 range of about 1 nm to about 100 nm.

1 8. (New) Nanosized Group VI transition metal catalysts of claim 7 wherein said
2 Group VI metals, and mixtures thereof are selected from Cr, MO and W, and mixtures thereof.

1 9. (New) The nanosized Group VI transition metal catalysts, and mixtures thereof of
2 claim 7 wherein the method of producing said Group VI metals and mixtures thereof catalysts
3 includes the step of sulfiding said nanosized Group VI metal and Group VI metal mixture
4 catalysts.

10. (New) Nanosized Group VI transition metal catalysts of claim 9 wherein said
Group VI metals, and mixtures thereof are selected from Cr, MO and W, and mixtures thereof.